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 Pocatello, Idaho	RCRA POND AREA WORK RULES			FMC-ID-001
				Issue Date: December 17, 2013
				Revision: 2.0
				Supersedes Date: July 19, 2012
Prepared by:	Rob Hartman	Approved by:	Barbara Ritchie	Page 1 of 4

SCOPE: These work rules pertain to ALL PERSONNEL (including, but not limited to FMC employees, contractors, regulatory personnel, and/or visitors) entering the RCRA Pond Area. These work rules are also intended to provide written training prior to entry into the RCRA Pond Area. FMC expects that all personnel will do their jobs in compliance with all applicable regulatory requirements, Health and Safety Plans, and FMC rules and plans. FMC reserves the right to immediately eject from the premises any person not working safely or to bar entry to any person lacking proper safety training (including the lack of training on these RCRA Pond Area Work Rules) or proper safety equipment or evidencing impairment.


GENERAL WORK RULES FOR THE RCRA POND AREA

The following work rules must be adhered to in the RCRA Pond Area:


1. All personnel entering the Plant site must sign in and out at the FMC Log-In Center located near the Main Entrance Gate.
2. Only persons authorized by FMC or an FMC representative shall be allowed to enter the RCRA Pond Area. Personnel entering the RCRA Pond Area must have a current (within the last 6 months) signed copy of these rules on file with FMC (or FMC representative). Having a signed copy of these rules on file does not, by itself, constitute authorization to enter the RCRA Pond Area.
3. Personnel working alone in the RCRA Pond Area must check in with their designated safety contact at the top of each hour. **CHECK-IN IS THE RESPONSIBILITY OF THE PERSON WORKING ALONE IN THE RCRA POND AREA.** If there has been no check-in with the safety contact, other available personnel will attempt to get in touch with that person. If no contact is made, the safety contact will investigate to ensure that the person is safe.
4. All personnel working in the RCRA Pond Area must have training meeting the requirements of the OSHA HAZWOPER standard (found at 29 CFR 1910.120) to be provided by their employer. Training shall include hazards that could be encountered at FMC, including potential exposure to phosphine gas (including Item #12 below). FMC may require evidence of such training prior to entry. Incidental contractors (typically inside the RCRA Pond Area 2 hours or less per week) may enter the RCRA Pond Area without HAZWOPER training only if their activities are performed outside the defined RCRA pond Limit of Final Cover and those personnel are accompanied at all times by a properly trained FMC employee or representative. Authorized visitors may enter the RCRA Pond Area without HAZWOPER training only as a passenger of a vehicle operated by a properly trained FMC employee or representative and remain within that vehicle at all times.
5. Personnel entering the RCRA Pond Area must have a cell phone capable of summoning assistance if needed. (NOTE: There are potential "dead spots" around the RCRA Pond Area depending on the cell phone service provider, so cell phone checks are advisable for personnel not familiar with these dead spots.) *workers need to check cover*
6. Personnel entering the RCRA Pond Area must have the following personal protective equipment (PPE) - shirt, full-length pants, hard hat, work gloves, safety shoes, and safety glasses with lateral protection. Any other PPE (such as respirator or hearing protection) is TASK SPECIFIC - to be determined during a safety review prior to beginning work. FMC may require a written report on any safety review prior to entry.
7. Training of personnel on the proper use and limitations of PPE is the responsibility of the respective employer. FMC may require evidence of appropriate training prior to entry.
8. No smoking is allowed in the RCRA Pond Area.
9. Any gate used to enter the RCRA Pond Area should be left **OPEN** while personnel are in the RCRA Pond Area in order to facilitate a quick exit, if necessary. *anyone?*

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10. Gates must be **CLOSED** when work is completed and all personnel have exited the RCRA Pond Area. The last person or crew leaving the RCRA Pond Area will check that all entry gates used that day have been closed and locked.
11. All RCRA ponds (with exception of former RCRA Pond 18 Cell B which was closed by removal) were closed in place with protective engineered covers installed. Also, there are buried power and other utility lines in the area.
 - **NO MECHANICAL OR HAND DIGGING IS ALLOWED ON THE CAP OR WITHIN 20 FEET OF THE CAP ANCHOR TRENCH ON THE CLOSED, CAPPED RCRA PONDS WITHOUT WRITTEN AUTHORIZATION FROM FMC.**
 - **NO MECHANICAL OR HAND DIGGING WITHIN THE RCRA POND AREA OUTSIDE THE CAP AND 20-FOOT EXCLUSION AREA IS ALLOWED BEYOND A 12 INCH DEPTH WITHOUT CONDUCTING A CHECK OF DRAWINGS AND CONDUCTING THE REQUIRED SAFETY REVIEW PRIOR TO PERFORMING ANY DIGGING.**
 - Personnel working on top of any RCRA pond should minimize the possibility of soil erosion or damage to existing monitoring equipment such as TMPs and settlement monuments.
 - Driving any vehicle on any RCRA pond cap surface is not allowed without prior approval from FMC or an FMC representative (except as noted below on the Pond 16S cap road).
 - The Pond 16S cap has a road for vehicle traffic. Vehicle drivers on this road must be cautious when driving or parking on this road. Large vehicles (over 4 wheels) must have a spotter when backing up on this road.
12. Possession of a calibrated, fully functional phosphine monitor is required for each person or group entering the RCRA Pond Area. Each person performing operation, maintenance, and/or monitoring (OMM) work (e.g., gas extraction/treatment operators or persons performing RCRA inspections, sampling, or maintenance) within the RCRA pond area shall be in possession of a calibrated, fully functional phosphine monitor. Persons not performing OMM work (e.g., supervisory personnel, vendors, or visitors) may enter as a group provided each group is in possession of a calibrated, fully functional phosphine monitor. Group members not in possession of a phosphine monitor must remain within 20 feet of a group member that is in possession of a phosphine monitor. Groups entering the RCRA Pond Area in vehicles must have at least one phosphine monitor per vehicle.
 - Phosphine monitors are available from the Plant O&M contractor – KASE/Warbonnet. Contact Mark Smith at (208) 681-8227 or the designated emergency coordinator.
 - Phosphine monitors must be fully functional and must have been calibrated within the last 14 days.
 - Any person in possession of a portable phosphine monitor will be provided hands-on training on the proper use of the monitor by their safety contact.
 - The portable PH3 monitors are programmed to alarm at 0.3 ppm and 1.0 ppm. Any person or group must record the location and reading of a confirmed phosphine monitor alarm (e.g., an alarm caused by vehicle exhaust, cell phone interference, etc., is not considered a "confirmed" phosphine monitor alarm) in air at or above 0.3 ppm. Confirmed air monitoring alarms will trigger an investigation of the source and potential corrective action in accordance with established procedures, provided that these measures can be safely performed. If a confirmed alarm of 1.0 ppm or higher is experienced, the individual (or group) must immediately relocate to an area that is monitored to be less than 0.3 ppm. In addition, any confirmed air monitoring alarm of 1.0 ppm phosphine or greater will trigger an additional round of fenceline monitoring for PH3 at the nine fenceline monitoring locations (sites 1 through 9) in accordance with established procedures. (Contact Mark Smith at (208) 681-8227 or the emergency coordinator if such an alarm is experienced.)

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- Any person entering a work area within the RCRA Pond Area that might reasonably be expected to result in a potential exposure to phosphine above 0.3 ppm, can only enter that work area with a "buddy", i.e., work cannot be performed alone in such an area. Regardless of the use of the "buddy" system, each person entering such an area will carry a phosphine monitor.
- Phosphine personnel monitoring "trigger levels" are:
 - No person will be allowed to work under conditions that would result in a phosphine exposure above the 8-hr TWA PEL of 0.3 ppm PH₃ or the STEL of 1.0 ppm PH₃.
 - If readings show less than 0.3 ppm, the task may proceed without restrictions.
 - If confirmed readings indicate the PH₃ level is between 0.3 ppm and less than 1.0 ppm, task work will be restricted to a maximum of 2 hours.
 - If confirmed readings attain 1.0 ppm PH₃, exposed workers must immediately relocate to an area that is monitored to be less than 0.3 ppm PH₃.
 - If workers need to re-enter the original work area after relocation, the original work area must be checked for phosphine prior to re-entry. Unrestricted work in the original task area can only resume when readings in the original task area have decreased to less than 0.3 ppm.
- If maintenance is required in response to RCRA Pond appurtenance PH₃ monitoring or a phosphine personnel monitoring alarm, a job planning and safety review will be completed prior to initiating the work. Based on the initial phosphine concentration detected during appurtenance monitoring or phosphine personnel monitoring, the phosphine source investigation and the safety review, maintenance personnel will utilize the appropriate safety pre-cautions to minimize the risk of exposure to phosphine. Under most conditions encountered to date, maintenance can safely be performed by opening the lid or door of the appurtenance which allows fresh air flow and working from the upwind side of the appurtenance. In some circumstances, soil will be placed over the identified source (e.g., base of a TMP cover). Depending on the measured or potential phosphine concentrations in the work area, additional safety pre-cautions may include:
 - Utilize nitrogen to provide an inert gas purge or blanket.
 - Utilize a gas extraction system (GETS at Pond 16S, GES or mobile GES unit) to collect /treat phosphine from the area requiring maintenance.
 - Utilize a gas extraction system (GETS, GES or mobile GES) to provide a fresh air sweep across the area requiring maintenance.
- If any worker feels they have experienced an overexposure to phosphine, they shall leave the RCRA Pond Area as quickly as possible and then notify their safety contact. Emergency response or a health care follow-up and/or an exposure assessment will then be arranged as appropriate.

 Pocatello, Idaho	RCRA POND AREA WORK RULES Proper Use of a Portable Phosphine Monitor		FMC-ID-001A
			Issue Date: February 15, 2011
			Revision: 1.0
			Supersedes Date: NA
Prepared by:	Marc Bowman	Approved by:	Jeff Hamilton
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Proper Use of a Portable Phosphine Monitor

1. Ensure that your monitor has been calibrated within the last 14 days. A green calibration sticker on the monitor will indicate if the calibration for the monitor is current.
2. Two types of monitors are used for industrial hygiene monitoring. These are the Toxipro and the Draeger Pac III.
3. **Toxipro Monitor**
 - a. **Turn on the monitor:** Push the button on the front of the monitor once. The monitor will go through an initialization. During this initialization the monitor will demonstrate the audible alarms for the 2 alarm points. The first alarm is at 0.30 ppm PH₃ and a second alarm occurs at 1.0 ppm PH₃.
 - b. **Ensure adequate battery life:** When there are less than 7 days of battery life remaining the low battery icon will appear on the screen. When there are less than 8 hours of battery life remaining a triangular warning symbol will appear over the low battery icon. If the monitor you are using has less than 8 hours of battery life exchange it for another monitor.
 - c. **Turning off the monitor:** Push and hold the button on the front of the monitor. The monitor will chirp 4 times and then shut down.
4. **Draeger Pac III Monitor**
 - a. **Turn on the monitor:** There are 3 buttons located on the front of the Pac III monitor. Two buttons on the left side and one button on the right side. To turn on the monitor push the right button and hold until the monitor beeps. The monitor will go through an initialization. During this initialization the monitor will indicate the 2 alarm points. The first alarm is at 0.20 ppm PH₃ and a second alarm occurs at 1.0 ppm PH₃.
 - b. **Ensure adequate battery life:** If the battery gets low during use of the Pac III a "Battery Low" warning will appear and the monitor will beep. If the monitor you are using has a low battery warning exchange it for another monitor.
 - c. **Turning off the monitor:** Push and hold the two left buttons on the front of the monitor simultaneously for at least 1 second. The monitor will shut down.
5. When using/carrying a phosphine monitor ensure the sensor aperture is kept clear.
6. If you have any questions on the operation of your phosphine monitor contact Mark Smith at: 208-681-8227.